

CLAIM AMENDMENTS

1 1. (original) A method for preparing a protective layer
2 for an aluminum-containing alloy of the Fe-Al, Fe-Cr-Al,
3 Ni-Al or Ni-Cr-Al type using the following steps:

4 forming on the surface of the alloy an oxide layer
5 exhibiting non-aluminum-containing oxides;

6 heating the alloy to temperatures to above 800°C such
7 that the non-aluminum-containing oxides on the surface of the alloy
8 inhibit the formation of metastable aluminum oxides and
9 substantially only α -Al₂O₃ oxides form.

1 2. (original) The method according to claim 1 wherein a
2 non-aluminum-containing oxide layer at a maximum thickness of 5000
3 nm, especially only 1000 nm, and especially advantageously only 100
4 nm, is formed.

1 3. (currently amended) The method according to claim 1
2 [[or 2]] wherein at least one of the oxides among the group (Ni
3 oxide, Fe oxide, Cr oxide or Ti oxide) is deposited on the
4 aluminum-containing alloy so as to form a non-aluminum-containing
5 oxide layer.

1 4. (original) The method according to the previous
2 claim 3 wherein the deposition is realized by vaporization and
3 condensing or cathode sputtering.

1 5. (currently amended) The method according to claim 1
2 [[or 2]] wherein for the formation of a non-aluminum-containing
3 oxide layer, at least one metal among the group (Ni, Fe, Cr or Ti)
4 is deposited on the aluminum-containing alloy, so that an oxide
5 layer corresponding to the metal forms therefrom in an oxygen
6 atmosphere.

1 6. (original) The method according to the previous
2 claim 5 wherein deposition through vaporization and condensing,
3 cathode sputtering or galvanic deposition is realized.

1 7. (currently amended) The method according to claim 1
2 [[or 2]] wherein for the formation of a non-aluminum-containing
3 oxide layer an aluminum-containing alloy is introduced into a
4 chloride- and/or fluorite-containing medium, whereby a
5 corresponding oxide or hydroxide layer forms at the surface of the
6 aluminum-containing alloy from an alloy metal that is not aluminum.

1 8. (original) The method according to claim 7 wherein
2 an aluminum-containing alloy is introduced into the medium over a
3 period of one minute to five hours.

1 9. (original) The method according to claim 7 wherein
2 the aluminum-containing component is introduced into the medium at
3 temperatures between 30 and 100 °C.

1 10. (currently amended) The method according to claim 1
2 [[or 2]] wherein for the formation of a non-aluminum-containing
3 oxide layer, the aluminum-containing alloy is heated to a
4 temperature below 800°C, especially a temperature in the 500 to
5 800°C range, whereby a corresponding oxide layer forms at the
6 surface of the aluminum-containing alloy from an alloy metal that
7 is not aluminum.